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**NAVAL WAR COLLEGE
Newport, R.I.**

The Need for an Operational Level Approach to Medical Evacuation

by

Brian N. Clifton

Major, United States Marine Corps

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: _____

May 4, 2011

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Abstract

The joint force has become dependent on helicopters for medical evacuation. This is because of the speed and flexibility the helicopter brings to the current battlefield against an enemy that does not have the ability to employ the full spectrum of military operations against U.S. forces. The success that air medical evacuation has experienced in both Iraq and Afghanistan has caused operational level commanders to completely negate the ability to conduct ground medical evacuations. These tactics, techniques and procedures not only diverge from doctrine, but also set a dangerous precedent for the future ability of the joint force to conduct medical evacuation missions when faced with a more capable foe. Additionally, the current practices that are being used in Afghanistan and Iraq have flaws that the enemy can exploit. In order to fix these deficiencies, an operational level approach to the command and control aspect of the medical evacuation mission is needed in order to synchronize both ground and air medical evacuation assets so that the maximum amount of efficiency and effectiveness can be achieved by the joint force. The author of this paper will explore the current command and control system in place for medical evacuation as well as make recommendations for a more sensible one. Additionally, arguments on missions with similar precedence, intangibles and history will be offered. The purpose of this is to better understand the current command and control structure for medical evacuation, its strengths and shortcomings so that operational leaders can integrate their forces to achieve success in a tactical level mission that has operational level effects.

The Need for an Operational Level Approach to Medical Evacuation

Joint Publication 4-02 states, “Geographic combatant commanders are responsible for coordinating and integrating Health Services Support within their theaters.”¹ This clearly gives operational level leaders the ability to organize the command and control of the medical evacuation mission. Further, Field Manual 8-10-6 states that “air and ground evacuation assets have both strengths and limitations” and “to be effective they must be employed in a synchronized system, each complementing the capabilities of the other.”² The joint force has gotten away from this doctrine and has become solely dependent on heliborne medical evacuation. In order to be successful in the future, the responsibility for command and control of both ground and air medical evacuation should be combined and elevated to the Joint Task Force (JTF) Commander’s level.

A personal story from the author’s experience that reinforces the recommendation for an operational level approach to medical evacuation can be taken from an event that happened during Operation IRAQI FREEDOM 04-06. On June 23rd 2005, a Marine convoy left a checkpoint in the Al Anbar province of Iraq after finishing operations for the day. It was 120 degrees Fahrenheit outside and a thick sand storm restricted the Marines visibility to less than 100 feet. On board one of the seven-ton cargo trucks, a group of female service members sat together. While the convoy was on its way back to Camp Fallujah, an insurgent driving a car filled with explosives rammed into the seven-ton and exploded. The blast killed several Marines instantly. Two of them were women. Others were wounded and burned by the flames that engulfed the vehicle. Worse yet, the wounded Marine’s ordeal was not over. As the wounded Marines scrambled from the wreckage, enemy snipers opened fire and made this vehicle-borne improvised explosive device (VBIED) attack into a complex ambush. The other Marines in the convoy, whom were not wounded in the VBIED attack, rushed to their

comrades. When the snipers were neutralized, both the dead and wounded Marines were loaded into the remaining vehicles of the convoy and hastily driven to Camp Fallujah.³ Once on base, the wounded were taken to the level II hospital where they were stabilized and prepared for helicopter medical evacuation to a level III facility. The call for casualty evacuation, which is a mission with subtle differences from medical evacuation and for simplicity will be combined with medical evacuation in this paper, was received by Marine Medium Helicopter Squadron 364 that was based at Al Taquaddum airfield less than twenty miles away. The first flight crew immediately launched, but had to return to the airfield via a precision approach because the raging sand storm limited visibility to almost nothing. Sensing the urgency of the situation, the squadron's commanding officer tried to complete the mission next. Even though he was the most experienced aviator in the squadron, he too had to return to Al Taquaddum due to the low visibility. The squadron's inability to make it to Camp Fallujah was reported up the chain of command.⁴ The doctors at the level II facility did the best they could with the limited equipment that their field hospital had, but in the end four more Marine females would die. Nine service-members dying in one attack on any day would have drawn the media's curiosity. The fact that six of the nine Americans killed that day were women really got the press's attention. A media storm followed and brought negative publicity that questioned the tactics, routes, vehicle armor and, most of all, the Marine leadership.⁵

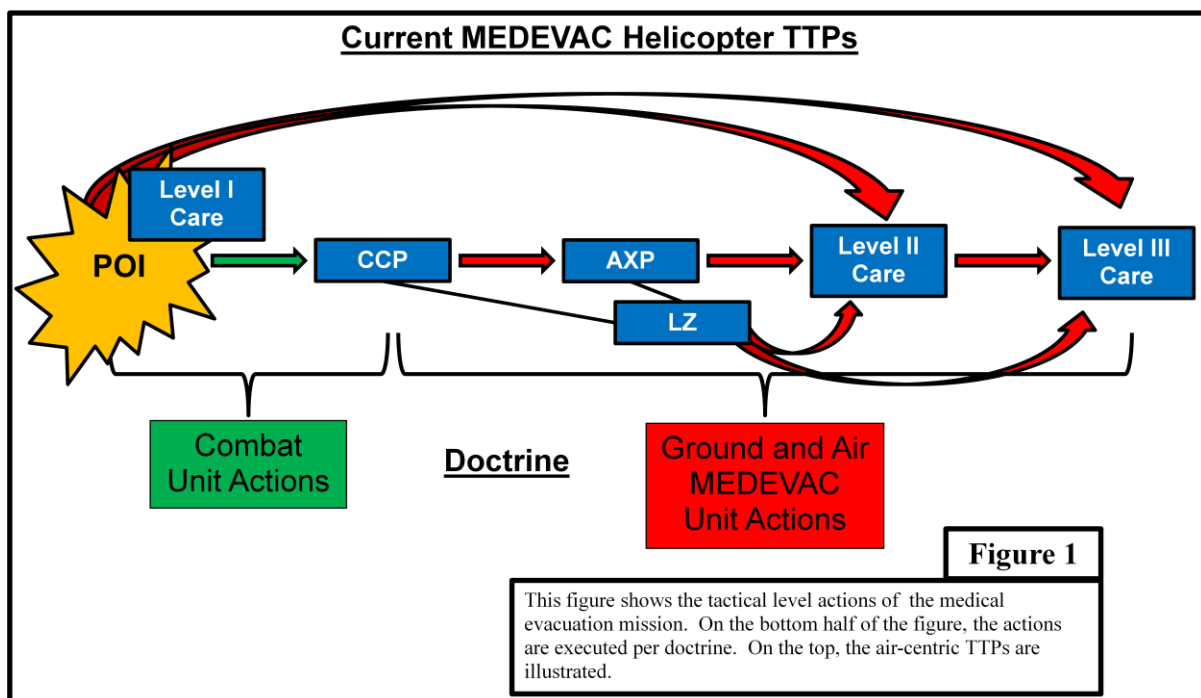
While the negative publicity was substantial, the real lesson that should be learned is medical evacuation is a mission that has operational level effects and commanders cannot allow the execution of this mission to be so one dimensional that a single point of failure causes the entire mission to collapse. Clausewitz writes that "War is a pulsation of violence, variable in strength and therefore variable in the speed with which it explodes and discharges

its energy.”⁶ There is little that operational level leaders can do to change the fact that some of their troops will be wounded and killed. However, operational leaders can change how their troops are cared for after the battle subsides. In this story, ground medical evacuation to a level III facility was never considered. There are several reasons for this. One, the tactical situation was not shaped to allow for ground medical evacuation. Two, there were no units or quick reaction forces trained for the mission. Finally, there was an inadequate command and control structure that could successfully coordinate ground and air assets.

To expand on the nature of the problem, it is necessary to give some background information on the current doctrine and combat environment. Battlefield medical care is classified in three different levels. Level I care is the immediate care that a service-member gets on the battlefield from a corpsman or medic. Level II care is typically a field hospital staffed with doctors and nurses. Here, the wounded service-member gets medical treatment from professionals. However due to the expeditionary needs of a field hospital to move with the combat units, the amount of technology and equipment that can be employed is limited. It is not until the wounded serviceman gets to a level III facility that all the assets of a modern hospital can be used to treat their injuries.

The process to get the wounded troops to this medical infrastructure is fairly straightforward. Simply put, the combat unit that has wounded troops is responsible for evacuating them to a casualty collection point (CCP) behind the forward edge of the battle area (FEBA). A medical platoon will then evacuate the wounded troops by ground to a field hospital. If the field hospital is far away from the CCP, then an ambulance exchange point (AXP) can be used to transfer the wounded troops to a different vehicle that is capable of higher speeds. This allows the medical platoon to return to the CCP in case there are more casualties and allows the already wounded troops access to higher level care sooner. The

wounded are then transported to a battalion aid station (BAS) which is typically capable of providing level II care. When stabilized, the wounded can then be moved by helicopter to a level III facility to receive an even greater standard of treatment. The doctrine begins to become more fluid once helicopters are introduced into the medical evacuation mission. The AXP can also be a landing zone (LZ) that helicopters can use to add speed to the equation. With helicopters, the options for which medical treatment facility the wounded will be taken to increase. Instead of simply taking the wounded to a BAS or level II facility, the entire process can be skipped and the wounded can be evacuated directly to a level III facility.⁷



This last point of how helicopters can skip the process is where the current and future combat environments are at odds with the doctrine. For the most part over the last ten years, American military forces have been fighting an enemy that does not have the ability to employ full spectrum military operations against them. Specifically, this enemy not only lacks aircraft, but also anti-air weapons. The air superiority that U.S. forces have, combined with the limited tactical engagements that are being fought, allow helicopters to fly past the

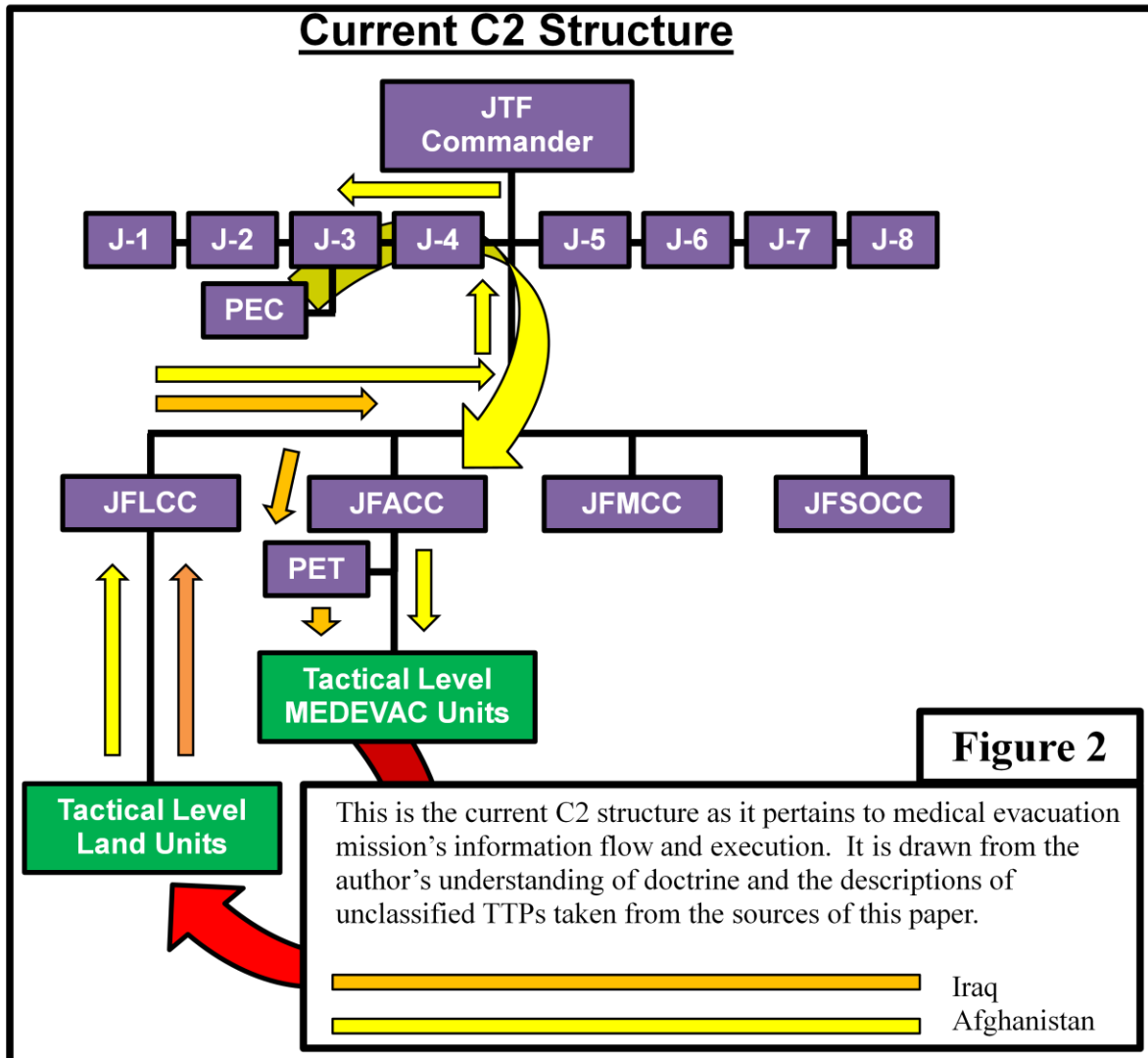
FEBA and right to the point of injury (POI). Once loaded, the helicopter can quickly evacuate the wounded troops to a level II or III facility. Almost all of the time, the wounded troops are at one of these medical facilities in under sixty minutes and that time frame has become the standard by which a medical evacuation mission is judged.⁸ It is called the “golden hour” because after an hour injuries sustained in combat start to have secondary and tertiary effects on the human body.⁹

Even though these heliborne tactics, techniques and procedures are swift and somewhat sound, they cause other problems for the operational level commander because the joint force has become solely dependent on helicopters for medical evacuation. The first problem is the operational tempo of tactical units is reduced when helicopters cannot fly medical evacuation missions due to poor weather. The commanding officer of Third Battalion First Marine Regiment recently pointed this out as a problem in his Afghanistan after action report. He states that there is risk to friendly force by reducing operational tempo because “the enemy will use periods of reduced visibility to maneuver, intimidate the populace and emplace IEDs.” Furthermore, he writes that when the visibility was too poor for helicopters to fly he would have his patrols stay closer to the forward operating base (FOB) so they could be evacuated by ground if they were wounded.¹⁰ This sole dependence on airborne medical evacuation gives the enemy a marked advantage in the operational factors of time, space and force. The enemy manipulates the shortcomings of the current medical evacuation doctrine to conduct their operations and when the weather improves they still have options. The enemy can move their operations into an urban or mountainous environment where helicopters have difficulty performing the medical evacuation mission.

This brings up the second problem. The tactical situation on the ground is not shaped to allow for ground medical evacuation because of the assumption that air medical

evacuation will be available. There is more risk involved with ground medical evacuation because the enemy may have access to the routes that will be used. In order to mitigate that risk, operational commanders will have to shape the environment by dedicating combat power and ISR assets to keep ground medical evacuation routes clear. This is a task that must be performed routinely. If not, then the flexibility to do ground medical evacuation missions will not be there when the air assets cannot execute.

This second problem highlights the issues with the current command and control structure used to execute the medical evacuation mission. As it currently stands, the Joint Force Air Component Commander (JFACC) has the launch authority for the medical evacuation helicopters.¹¹ While the JFACC certainly has situational awareness of the tactical situation on the ground, he or she has very few ground forces assigned that can shape the battlefield. Those forces typically belong to the Joint Force Land Component Commander (JFLCC). The JFLCC and JFACC do have the ability to coordinate and work together, but this is a difficult process to support in depth. Differences in tasking, priorities and even collocation of staffs make this a tenuous prospect. As long as the command and control lies with JFACC, ground medical evacuation will be under-sourced and under-utilized.

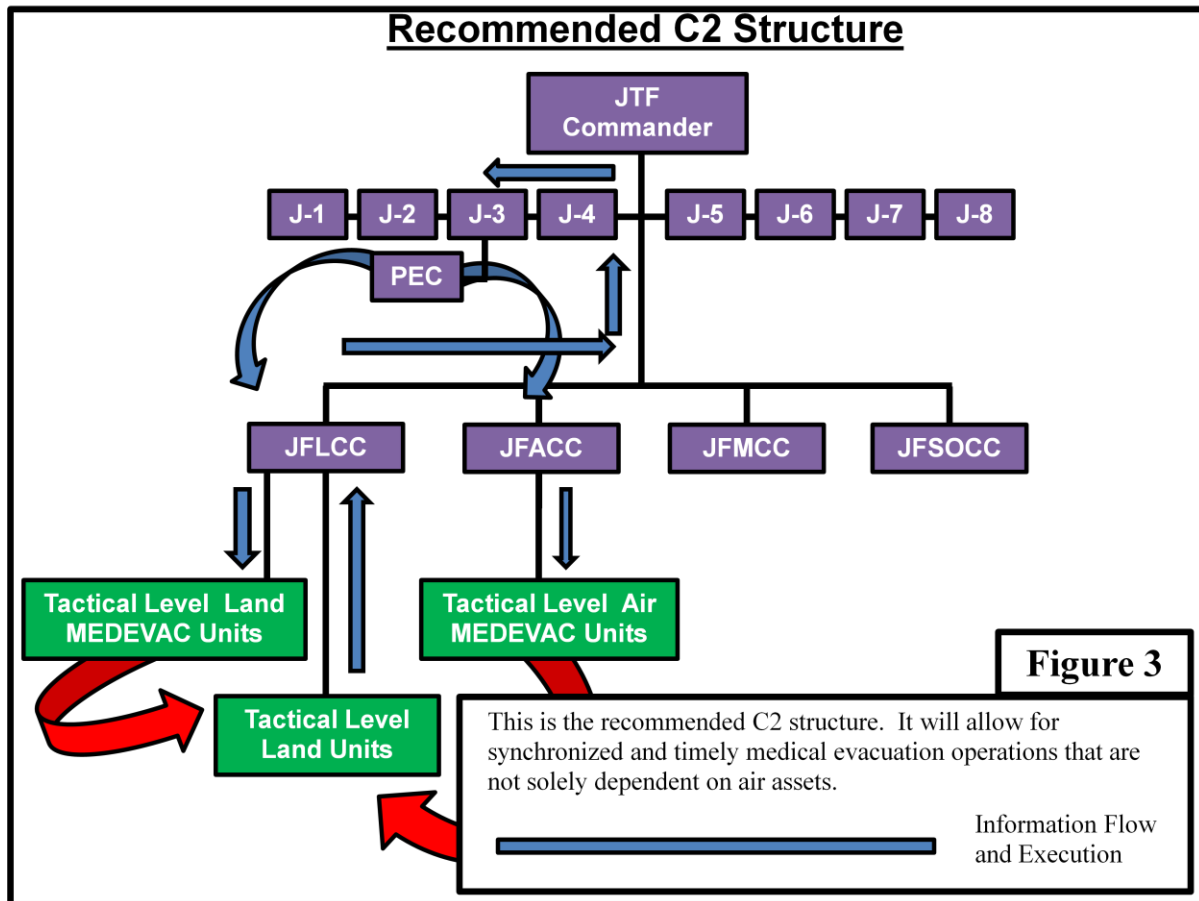


Finally, the sole dependence on airborne medical evacuation sets a dangerous precedent. While it is unlikely that US forces will be engaged with a conventional enemy that has ability to conduct full spectrum military operations, it is not impossible. As professionals and stewards of the force, operational level commanders have a duty to constantly evaluate current doctrine and tactics against not just today's enemy, but also tomorrow's. An enemy with even a moderate integrated air defense system, anti-aircraft artillery and man portable air defenses will make airborne point of injury (POI) medical evacuations too risky.¹² For these reasons, command and control of the medical evacuation

should be elevated to the JTF commander's level so the execution can be synchronized and coordinated with assets from the other functional component commands to allow for success.

The recommendation to elevate the command and control structure for medical evacuation to the JTF level is not a profound or difficult change to make. Most of the communication infrastructure and personnel are already in place. Real time information streams from the tactical level of the battlefield and up into the operations centers of not just the functional component commanders, but also the JTF commander. "Voice, data, imagery and video" connect Soldiers to leaders now which allows commanders to "fuse data more efficiently, enabling a more accurate understanding of the battlefield and better collaboration to enhance decision making."¹³ The information that flows over "mirc" chat and other combat information systems update the JTF commander at the same time as the subordinate commanders. This reduces the need for extra layers of headquarters between the JTF commander and the troops for certain missions. As far as personnel go, an additional staff would not be needed because one already exists fractured across different headquarters units. In Iraq this staff was called the Patient Evaluation Team (PET). This team is made up of Health Services Support (HSS) personnel and at least one doctor. The PET was located with the JFACC headquarters element and interfaced through JFACC's Senior Watch Officer (SWO). The PET stands duty twenty-four hours a day in CFACC's operations center and determines how to medically respond to the requests from the tactical units for medical evacuation. Their decisions include which type of medical personnel travel with the helicopter to get the wounded service-member and which medical facility the helicopter will take the patient to. The PET's inputs are given to CFACC's Senior Watch Officer (SWO) who then authorizes the medical evacuation mission and helicopter launch. Again, this command structure illustrated how air-centric the medical evacuation mission has become.

Things are a little different in Afghanistan, but the C2 problems are still not solved. The name of the HSS team has changed to the Patient Evacuation Coordinator (PEC), but the mission is still the same. Additionally, the PEC moved its command and control structure from JFACC's operations center to Regional Command's (RC) operations center.¹⁴ This is a step in the right direction as the RC commander does have the authority to synchronize and direct other functional components in the region, but the command and control for launch of the only medical evacuation assets in theater, the helicopters, is still under CFACC's authority. Crucial time, which amounts to a life or death for a wounded service-member, is lost as the request for medical evacuation travels up from the tactical level to the operational level of the JTF headquarters and then back down to the tactical level at the JFACC's HQ. In order to fix these issues, the whole process should be elevated the JTF level. The HSS team and the command structure should be collocated in the same operations center. The PET or PEC would only need to grow by two members. An aviation liaison and a ground liaison would be able to manage the PET's inputs, come up with a course of action for the medical evacuation and then make their recommendation to the JTF's SWO. The JTF's SWO would not only have launch authority for helicopters, but also the authority to task ground medical evacuation assets as a type of quick reaction force.



In terms of problems with coordinating the medical evacuation mission, combat units already see this issue. Upon return from Afghanistan Third Marine Aircraft Wing (MAW) published in their latest after action report that because medical evacuation was supported by JFACC and coalition assets across RC Southwest, TACC SWOs had to “work through three separate commands located in three different Tactical Operations Centers”. Additionally the TACC SWO’s believed that if the PEC had been staffed with Army, Air Force and British LNOs that were collocated, the response time for medical evacuation could have been reduced.¹⁵

This last point from the Third MAW’s lessons learned is the real logic behind the problem and this recommendation. Medical evacuation is a mission that is multi-faceted and needs to be coordinated across all functional components. Only the JTF commander has the

ability to synchronize and direct all of these subordinate commander's actions. Instead of just having JFACC assets working this problem, creative and integrated solutions could be employed by using combinations from functional component areas. For example, JSOCC assets could be used for ground medical evacuation route reconnaissance and monitoring. Additionally, JFMCC assets could be used as additional treatment facilities that have capabilities that closely resemble level III hospitals. Time is the enemy that has to be combated here and with JTF level control of this mission all functions of the joint force can respond quickly. When the mission is under JFACC control, the adjacent units do not and will not have the same willingness to coordinate to this level simply based on the command and control structure. Elevating the mission to the JTF level shows the importance of the medical evacuation mission and the JTF commander's recognition of it as a priority.

The counter-argument to this recommendation is that the current way that the medical evacuation mission is accomplished works. The simple and traditional command and control structure provides flexibility for each functional component commander to be able to accomplish medical evacuation in their own area of expertise. JFACC's air assets and JFLCC's combat forces remain intact and subordinate to their respective commander. When assistance is needed to augment a particular component commander's forces then there are channels for which that assistance can be requested and ultimately received. Changing the command and control structure and taking the ability to task certain units from the functional commanders because they are reserved by the JTF commander's medical evacuation mission would only complicate coordination and confuse the operators that execute it.

Besides these issues, the proponents of this counter-argument would also point out that since servicemen and women are injured at the tactical level that is where improvements should be made. A recent article in the journal titled *Army*, supports this approach. It states,

“The survival rate of service-members injured in combat is greater than 90 percent. This has been accomplished despite increasing destructive weapons wielded by an adaptive enemy and wounds unparalleled in civilian trauma medicine. We believe armored vehicles, body armor, better training of all warriors in self- and buddy-aid, better trained medics, faster helicopter rescues, and rapid evacuations out of theater all contribute to lowering our killed-in-action and died-of-wounds rates.”¹⁶

The rebuttal to the stigma that fosters the military’s resistance to change and this focus on the tactical level is simple. The combat environment has changed. Of course, commanders must train and equip the forces that operate on the tactical level to increase the survivability rate of service-members. This is not the issue. Today’s joint force has evolved in terms of equipment and training. Every Soldier, Sailor, Airmen and Marine now patrols the battlefield with body armor and a computerized vehicle with Mine Resistance Armor Protection (MRAP). The challenge is that commanders need to evaluate the changes that a new enemy and transformed combat environment brings as equipment improves and technology adds capability to the joint force. That is where the operational level discussions come in and where tactical missions that have operational level effects, like medical evacuation, should have their command and control and execution reviewed.

While the recommendation to elevate the command and control of medical evacuation to the JTF commander’s level may sound like a radical and unconventional idea, there is precedence for just this type of thinking. Fires is another mission that is executed on the tactical level, but has operational level effects. Traditionally and even typically, the JTF Commander assigns the JFACC as the lead for targeting. However, JP 3-09 *Joint Fires Support* states that, “The JFC may approve the formation of a Joint Fires Element (JFE) within the J-3. The JFE is an optional staff element comprised of representatives from the J-

3, the components, and other elements of the JFC's staff, to include the intelligence directorate of a joint targeting staff, logistics directorate of a joint staff, plans directorate of a joint staff, and others as required. The JFE is an integrating staff element that synchronizes and coordinates fires planning and coordination on behalf of the JFC and should be physically located in the JTF operations center, collocated with the information operations cell if possible. The JFE assists the J-3 in accomplishing responsibilities and tasks as a staff advisor of the JFC.”¹⁷ The publication goes on to list thirteen coordinating, monitoring and developmental roles and tasks that the JFE would accomplish which could be transcribed word for word to medical evacuation doctrine. While the specifics of those JFE tasks are not critical, the idea behind why a JFE is used sometimes is important. That idea is captured in the last sentence of the JFE section of JP 3-09. “These coordinators have one goal in common - to effectively direct the integration and employment of joint fire support to accomplish the mission.”¹⁸ That ethos is exactly what drives the need for an operational approach to medical evacuation. A JFE is stood up because the JTF commander understands the importance of the Fires mission in their operation and they want to have complete and total oversight of the targeting in order to ensure the mission is executed effectively. This action also has another effect. Each functional component gets a fair and uniformed process for targeting. In an article titled “Joint Targeting Doctrine” that was published in the journal *Field Artillery*, LtCol Thomas J. Murphy and LtCol Bernd L. Ingram state that JFEs break down “stovepipe organizational walls” and facilitate “joint operations.”¹⁹

Additionally since time plays such a critical role in the success or failure of medical evacuation, a greater appreciation of this precedence argument can be gained by thinking of a wounded service-member along the same lines as a time-sensitive target. The same authors from the previous article, LtCol Murphy and LtCol Ingram, comment on time-sensitive target

doctrine as described in both FM 90-36 *The Joint Targeting Process and Procedures for Targeting Time-Critical Targets* and JP 3-60 *Doctrine for Joint Targeting* by observing that these manuals lean towards three major points. First, “that the doctrine writers are transitioning to effects-based fires.” Second, that time-sensitive targets “shift the centralization of the joint targeting effort away from the JFACC to the JFC and his J3.” Finally, “time-sensitive targets are significantly unique to warrant special attention and unique tactics, techniques and procedures (TTP).”²⁰ All of these points are made to decrease the time it takes to execute a tactical level mission that has operational effects. Again, this type of thinking perfectly summarizes the intent of this medical evacuation recommendation. By elevating command and control of the medical evacuation mission to the JTF level, the same premise that applies to saving time in time-sensitive target doctrine by expediting the process could be applied. Medical evacuation can be looked at as effects-based and unique enough to warrant its own TTPs. Plus, JTF commanders will get the same type of effects that a JFE brings to the operation. They will get a staff that can direct all assets, not just air assets, and integrate their actions to accomplish the medical evacuation mission.

Aside from seeking the most effective and efficient way to command, control and execute the medical evacuation mission because it is the ethical and professional thing to do, there are many other reasons why this tactical mission matters on the operational level. There are intangible effects that spring out of its success or failure. Secretary of Defense Robert Gates stated in a speech in the Fall of 2009 that, “There is no higher priority for the Defense Department, after winning the war itself, than caring for our wounded warriors.”²¹ Secretary Gates shows the importance of the medical evacuation mission in this remark. There are several reasons for this. First, the management of the media is a constant ongoing effort. The scandal that ensued after the allegations that Walter Reed was providing

substandard care clearly show how volatile a topic medical care for American service-members can be. If the media can find a fault in the medical evacuation mission, then a similar storm of negative publicity would ensue. This media attention is not only something additional that the JTF commander has to deal with, but also a distraction for the troops that bravely execute their assigned missions.

This brings up an intangible effect of the medical evacuation mission, troop morale. FM 7-20, *The Infantry Battalion*, states that “Casualty evacuation requires extensive plans, preparations, battlefield initiative, and coordination. The effectiveness of casualty evacuation influences the unit’s morale and combat effectiveness.”²² Commanders at all levels of war order brave service-members to execute dangerous missions. In order to be effective, the joint force has to be able to strike the enemy where they are strong and feel they are safe. If the service-member executing these dangerous tasks feel like they will not be taken care of if they are injured then they will not take the risks that are sometimes necessary to attain mission success. They need to know that there is an integrated, competent and swift network ready to help them if they get injured in combat. When they understand that, there is nothing that these patriots cannot accomplish.

The next intangible is the American populace’s casualty aversion. Senator John Glenn is quoted as saying, “It’s easy to see people go off to war and the bands play and the flags fly. And it’s not quite so easy when the flag is draped over a coffin coming back through Dover, Delaware.” Academics argue whether or not the American populace has been influenced by the great number of casualties experienced during the Vietnam War and then by the barracks bombing in Beirut, Lebanon. This became their expectation and it was unacceptable. Then, they were surprised and their views were subsequently changed by the nearly casualty free victories in DESERT STORM, Bosnia and Kosovo. Proponents of this

argument would say that this is what led to the hasty withdrawal from Somalia and what changed perceptions about the state of affairs in Iraq during 2004.²³ Either way, injured or dead service-members negatively influence American public opinion and erode the political will to continue to fight. This intangible effect must be countered not only by a strong strategic communications campaign, but also by a robust ability to evacuate wounded service-members so as to mitigate its effects on American public opinion. JP 4-02 states that an “Effective HSS enhances the combat strength of the joint force by maintaining physically and emotionally fit personnel and by treating the wounded, injured, or sick to promote their survival, recovery, and return to duty.”²⁴ This intangible will either reflect negatively on the operation or positively. If the operation requires that a large number of service-members have to die, then the American public will expect that it was a necessary cost for national interests and that everything that could be done to prevent unnecessary deaths was addressed.

The last intangible effect the medical evacuation mission creates is that it has the ability to influence the local populace of the country that the joint force is operating in. U.S. service-members are not the only people who are medically evacuated. Civilians and even enemy combatants are evacuated and given professional medical care. These actions can shape the local populace’s perceptions of the joint force and help turn a non-permissive environment into a permissive one. In a counterinsurgency campaign, medical evacuation of both insurgents and the civilians that are injured by the insurgents actions help to win the “hearts and minds” that are crucial for this type of warfare. An example of this type intangible event can be found in a newspaper article titled “Saving Wells and Little Girls”. The article chronicles a fifteen year old injured Iraqi girl as she is medically evacuated by Marines that “put themselves at great personal risk” to help her.²⁵ That Iraqi girl and other

like her will eventually return to their parents and village. When they do, the intangible effect will be a positive story of the joint force.

The reason for pointing out the intangible effects of the medical evacuation mission is to highlight the fact that some mission's effects are not confined to one level of war. Their execution or lack of execution can have secondary and even tertiary effects. Secretary Gates clearly understands this. In January of 2009, he ordered more forces to become involved with the medical evacuation mission in Afghanistan in order to bring down response times. While wounded troops in Iraq were receiving medical treatment in less than an hour, the troops in Afghanistan were not as lucky. These service-members averaged seventy-one minutes across Afghanistan as a whole with some units in the more remote areas averaging closer to two hours. Secretary Gates even went on to assign Air Force combat rescue units, which traditionally do not do medical evacuation, to try and account for this shortfall.²⁶ This may temporarily help to reduce the time it takes to get wounded troops to medical care by adding additional air assets to help perform the tactical mission, but it does not solve the problem as a whole. Plus, it takes these Air Force units away from their primary mission of recovering downed pilots and thus reduces the relative combat power of the JTF commander.²⁷ In order to reduce the response time for medical evacuation to the joint force's best effort, the command and control of the mission needs to be elevated to the JTF commander's level. With ground and air assets synchronized under a unified command and control effort, the harsh terrain and unpredictable weather of Afghanistan can be overcome. Secretary Gates understands his moral and ethical duty to the troops serving in Afghanistan as well as the ramifications that the intangible effects of the medical evacuation mission has. That is why he ordered this change. It was warranted, but a "top-down" approach to solving

this problem would yield more results and produce positive outcomes from the intangibles associated with the medical evacuation mission.

To truly test this recommendation and gauge its validity, it has to stand up against history. Three historical examples from wars that saw the maturation of airborne medical evacuations can be used. The first example is Korea. In the early 1950's the helicopter had not been used by the military for very long. Its speed however was already recognized. In an excerpt from an 1953 Marine Corps Gazette article entitled "Plan for Your Wounded", Navy Captain Eugene R. Hering writes, "While evacuation by 'copter is the fastest and easiest way to handle casualties, care must be exercised that minor casualties are not evacuated by air. Since helicopters usually by-pass the BAS, men with minor wounds would be delayed in returning to duty. And while helicopters should be used whenever possible for the serious casualties, main reliance must be placed upon routine methods of evacuation."²⁸ From the moment it arrived, the helicopter brought confusion along with speed to the battlefield. The lesson that should be learned from this example is that even sixty years ago when joint forces did not have real time information, they still could have used a centralized and synchronized approach to medical evacuation. This could have allowed the troops with minor injuries to return to the fight and preserved the JTF commander's combat power while swiftly saving service-members with serious injuries.

Vietnam was a different conflict. Helicopters and their tactics had evolved. Dr. B. Eiseman, an Army physician, wrote that the orderly doctrine of medical evacuation was "thoroughly upset" by the helicopter. When left to execution by those on the tactical level, "inappropriate distribution overloads" medical units while other units are left "unoccupied". He suggested that a Medical Evacuation Coordinator be established. Additionally, the Medical Evacuation Coordinator would be "an absolute necessity for a controller of all

casualty-carrying helicopters. He must be current as to casualty load and operating room availability in all hospitals in the area.”²⁹ This idea has the beginnings of what synchronized command and control on the JTF level would do for the medical evacuation mission. Not only would wounded troops get expedient evacuation, but they also would be taken to a field hospital that is best suited to offer them care.

The last historical example is from the 2004 Battle of Fallujah in Iraq. It differs from the previous two examples as it deals less with information management and more with force synchronization. In the article “Urban Combat Casualty Evacuation”, SgtMaj William Skiles describes his experiences as Company First Sergeant of Echo Company Second Battalion First Marines. During the urban battle, SgtMaj Skiles describes the air medical evacuation mission as a “100 percent no-go” due to the lack of landing zones and fierce combat conditions. He also acknowledges that “the company needed a more thorough plan” for medical evacuation. To bridge this gap, SgtMaj Skiles, his corpsman and two Marines formed their own ground medical evacuation unit.³⁰ Their actions saved several Marines over the course of that battle, but two thoughts come to mind by reading this article. One, SgtMaj Skiles, his corpsman and the Marines that assisted him are brave and true heroes. Two, they had to be these heroes because the operational level leadership failed them. The assets for ground medical evacuation were not adequate for the task and air medical evacuation was impossible. This unit went into battle without a plan for medical evacuation and the price they paid was the leadership of their senior Staff Non-Commissioned Officer. While SgtMaj Skiles’s actions were heroic, his unit needed his leadership as they conducted the brutal tasks associated with urban combat. His initiative saved lives, but in reality the lack of operational level planning for the synchronization of medical evacuation reduced the respective combat power of Echo Company. This entire situation could have been avoided if

the command and control structure had been on the JTF commander's level. The appropriate air and ground assets would have been trained, appropriated and ready to respond to this urban situation. Instead of SgtMaj Skiles driving to the outskirts of Fallujah to get his Marines medically evacuated, any Marine could have moved the wounded troops two blocks to the casualty collection point (CCP), transferred custody of the wounded to the service-member in charge of ground medical evacuation and then returned to the fight. The ground medical evacuation unit would then move this wounded Marine to an AXP or LZ where they could be medically evacuated by air assets. The doctrine works. The joint force just needs to command and control it better in order to achieve the optimum results.

In conclusion, Major General Rupert Smith said, "The only certain result of your plan will be casualties – mainly the enemy if it is a good plan, yours if it's not. Either way, foremost in your supporting plans must be the medical plan."³¹ This encapsulates the current problem and this recommendation. Operational level leaders have a moral and ethical duty to provide the best medical care possible for combat troops. If they do not, then the failures of this tactical level mission will encroach on the operational level of war. Additionally, operational leaders also have a professional duty to seek, engage and destroy the enemy at all times. Elevating command and control of the medical evacuation mission to the JTF commander's level will not only accomplish the medical evacuation mission more efficiently, but also improve the way the joint force fights.

NOTES

¹ Joint Staff, *Doctrine for Health Services Support in Joint Operations*, Joint Publication (JP) 4-02.(Washington, DC: Department of Defense, 26 April 1995), vii.

² U.S Army, *Medical Evacuation in a Theater of Operations*, Field Manual (FM) 8-10-6 (Washington, DC: Headquarters Department of the Army, 31 October 1991), 4-1.

³ Michael Moss, "A Mission That Ended in Inferno for 3 Women," nytimes.com, 20 December 2005,
http://www.nytimes.com/2005/12/20/international/middleeast/20marines.html?_r=1&pagewanted=print (accessed 8 April 2011).

⁴ Major Brian Clifton, A personal story from the authors experiences, 23 Jun 2005.

⁵ Michael Moss, "A Mission That Ended in Inferno for 3 Women," nytimes.com, 20 December 2005,
http://www.nytimes.com/2005/12/20/international/middleeast/20marines.html?_r=1&pagewanted=print (accessed 8 April 2011).

⁶ Karl von Clausewitz, *On War* (Princeton, NJ: Princeton University Press, 1976), 87.

⁷ U.S. Army, *Medical Evacuation*, Field Manual (FM) 4-02.2 (Washington, DC: Headquarters Department of the Army, 8 May 2007), 4-I-IV.

⁸ John Barry, "A War Within," newsweek.com, 12 September 2010,
<http://www.newsweek.com/2010/09/12/what-gates-plans-to-do-before-he-leaves-office.html> (accessed 17 April 2011).

⁹ John Barry, "A War Within," newsweek.com, 12 September 2010,
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¹⁰ U.S. Marine Corps, *3/1 OEF 10-1 Initial AAR*, mccll.usmc.mil, November 2010,
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¹¹ Joint Staff, *Command and Control for Joint Air Operations*, Joint Publication (JP) 3-56.1 (Washington, DC: Department of Defense, 14 November 1994), III-2.

¹² Thomas E. Eagles, "The Coming Crisis in Medical Care," *Marine Corps Gazette* 68,9 (September 1984), 28, <http://www.proquest.com/> (accessed 11 February 2011).

¹³ U.S. Army, “The network: centerpiece of Army modernization,” *Soldiers* (January 2011), 17, <http://www.proquest.com/> (accessed February 2011).

¹⁴ U.S. Marine Corps, *Lessons and Best practices from 3d Marine Aircraft Wing in Operation Enduring Freedom*, mcell.usmc.mil, 15 March 2011, <https://www.mcell.usmc.mil/index.cfm> (accessed 19 March 2011).

¹⁵ U.S. Marine Corps, *Lessons and Best practices from 3d Marine Aircraft Wing in Operation Enduring Freedom*, mcell.usmc.mil, 15 March 2011, <https://www.mcell.usmc.mil/index.cfm> (accessed 19 March 2011).

¹⁶ Eric B. Schoomaker, “AMEDD: Keeping the Army Fit to Fight,” *Army* 59, 7 (July 2009), 23, <http://www.proquest.com/> (accessed 11 February 2011).

¹⁷ Joint Staff, *Joint Fire Support*, Joint Publication (JP) 3-09. (Washington, DC: Department of Defense, 20 June 2010), II -2.

¹⁸ Joint Staff, *Joint Fire Support*, Joint Publication (JP) 3-09. (Washington, DC: Department of Defense, 20 June 2010), II -4.

¹⁹ Thomas J. Murphy and Bernd L. Ingram, “Joint Targeting Doctrine,” *Field Artillery* 5 (September/October 2001), 37, <http://www.proquest.com/> (accessed 21 February 2011).

²⁰ Murphy, Thomas J. and Ingram, Bernd L., “Joint Targeting Doctrine,” *Field Artillery* 5 (September/October 2001), 37, <http://www.proquest.com/> (accessed 21 February 2011).

²¹ Chris Walz, “Warrior Care Month Every Day Celebration for IWFLO , MCLO,” dcmilitary.com, 4 November 2010, http://www.dcmilitary.com/stories/110410/journal_28277.shtml (accessed 10 April 2011).

²² U.S. Army, *The Infantry Battalion*, Field Manual (FM) 7-20 (Washington, DC: Headquarters Department of the Army, 6 April 1992), F-1.

²³ Richard A. Lacquement, “The Casualty-Aversion Myth” Our Excellent Adventure Blog, <http://www.ourexcellentadventures.com/wp-content/stcpublications/The%20Casualty-Aversion%20Myth.pdf> (accessed 16 April 2011).

²⁴ Joint Staff, *Doctrine for Health Services Support in Joint Operations*, Joint Publication (JP) 4-02 (Washington, DC: Department of Defense, 26 April 1995), I-1.

²⁵ Oliver North, “Saving Wells and Little Girls,” *Human Events* 59,11 (31 March 2003), 1, <http://www.proquest.com/> (accessed 11 February 2011).

²⁶ Thom Shanker, “Gates Seeks to Improve Battlefield Trauma Care in Afghanistan,” nytimes.com, 27 January 2009, <http://www.nytimes.com/2009/01/28/washington/28military.html?adxnnl=1&adxnnlx=1303187487-3Vt+Sz6/nCwOobNbt2gBAw> (accessed 11 February 2011).

²⁷ Michael Peck, "Evacuation Under Fire," *National Defense* 90, 630 (May 2006), 32, <http://www.proquest.com/> (accessed 11 February 2011).

²⁸ Eugene R. Hering Jr., "Plan for your Wounded," *Marine Corps Gazette* 37,10 (October 1953), 40, <http://www.proquest.com/> (accessed 11 February 2011).

²⁹ B. Eiseman, "Ambulance Volante," *Marine Corps Gazette* 54, 5 (May 1970), 53, <http://www.proquest.com/> (accessed 11 February 2011).

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